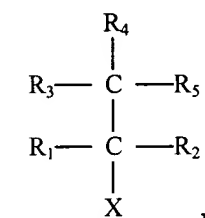


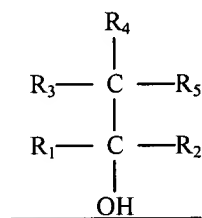
## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An improved process for the preparation of 2-aryl propionic acids, the said process comprising steps of:

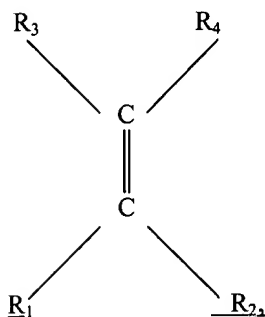
- (i) reacting an aryl compound selected from an arylalkyl halide having general formula [I],



aryl alcohol having general formula [II]



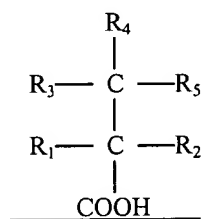
or aryl substituted olefins having general formula [III]



as shown in the accompanying drawings, wherein,  $R_1$  is aryl, substituted aryl, naphthyl or substituted naphthyl groups,  $R_2$ ,  $R_3$ ,  $R_4$  and  $R_5$  are independently hydrogen, alkyl, aryl, arylalkyl or cycloaliphatic groups with or without substituents and X is a halogen atom selected from chlorine, bromine or iodine

with a halide promoter, an organic acid, having essentially less than 6% w/v  
 water and a palladium catalyst in an organic solvent selected from ketones or  
 cyclic ethers in carbon monoxide atmosphere under homogeneous conditions, at  
 a temperature ranging between 30 to 130°C, for a period ranging between 0.3 to  
 4 hrs, at pressures ranging between 50 to 1500 psig,

- (ii) cooling the reaction mixture to an ambient temperature,
- (iii) flushing the reaction vessel with an inert gas,
- (iv) removing the solvent, and
- (v) separating the catalyst and isolating 2-aryl propionic acid having a formula as follows:



wherein,  $R_1$  is aryl, substituted aryl, naphthyl or substituted naphthyl groups,  
 $R_2$ ,  $R_3$ ,  $R_4$  and  $R_5$  are independently represented by hydrogen, alkyl, aryl,  
 arylalkyl, cycloaliphatic groups with or without substituents.

2. (Previously Amended) A process as claimed in claim 1, wherein catalyst is selected  
 from the group of palladium(O) or palladium(II) compound comprising palladium chloride,  
 palladium bromide, palladium iodide, bis(triparatolylphoshino) dichloro palladium(II),  
 bis(triethylphosphino) dichloro palladium(II), bis(triisopropylphosphino) dichloro  
 palladium(II), dibenzylideneacetato- palladium(O), cyclooctadiene dichloro palladium(II),

6 bisbenzonitriledi-chloro palladium(II), acetylacetonato palladium(II) and bisacetonitrile  
7 dichloro palladium(II).

1 3. (Previously Cancelled)

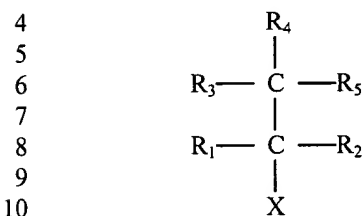
1 4. (Previously Cancelled)

1 5. (Previously Cancelled)

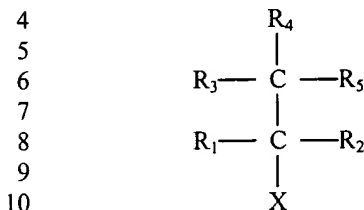
1 6. (Previously Cancelled)

1 7. (Previously Cancelled)

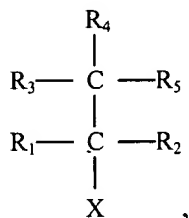
1 8. (Previously Amended) A process as claimed in claim 1 wherein the concentration  
2 of the catalyst is one mole of catalyst for every 50 to 50000 moles of the compound having the  
3 formula



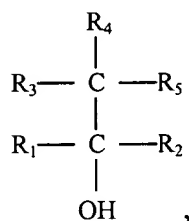
1 9. (Previously Amended) A process as claimed in claim 8 wherein the concentration  
2 of the catalyst is one mole of catalyst for every 100 to 6000 moles of the compound having  
3 formula



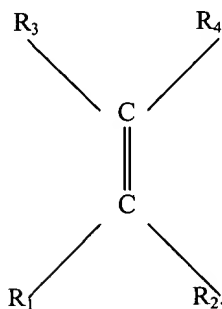
10. (Previously Amended) A process as claimed in claim 1 wherein the concentration of the catalyst is one mole of catalyst for every 150 to 2000 moles of compounds having formula



formula



or formula



11. (Original) A process as claimed in claim 1 wherein the amount of halide promoter per gram mole of the catalyst is in the range of 5 to 500 moles.

12. (Original) A process as claimed in claim 11 wherein the amount of halide promoter per gram mole of the catalyst is in the range of 10 to 300 moles.

1           13. (Original) A process as claimed in claim 12 wherein the amount of halide  
2 promoter per gram mole of the catalyst is in the range of 25 to 150 moles.

1           14. (Original) A process as claimed in claim 1 wherein the amount of organic acid per  
2 gram mole of catalyst may be in the range of 5 to 500 moles.

1           15. (Original) A process as claimed in claim 14 wherein the amount of organic acid  
2 per gram mole of catalyst may be in the range of 10 to 300 moles.

1           16. (Original) A process as claimed in claim 15 wherein the amount of organic acid  
2 per gram mole of catalyst may be in the range of 25 to 150 moles.

1           17. (Currently Amended) A process as claimed in ~~{claims}~~ claim 1 wherein the  
2 amount of water is in the range of 1 to 6% (v/v) of the total reaction mixture.

1           18. (Currently Amended) A process as claimed in ~~{claims}~~ claim 17 wherein the  
2 amount of water is in the range of 3 to 5% (v/v) of the total reaction mixture.

1           19. (Currently Amended) A process as claimed in claim 1 wherein the reaction is  
2 carried out even at low pressures of carbon monoxide ~~{upto}~~ up to 50 psig.

1           20. (Currently Amended) A process as claimed in claim 7 wherein the cyclic ethers  
2 are tetrahydrofuran and dioxan.

3           21. (New) A process as claimed in claim 1 wherein step (I) the organic solvent is  
4 selected from the group of ketones comprising methyl ethyl ketone, methyl isobutyl ketone,  
5 diethyl ketone, methyl n-propyl ketone, acetophenone or cyclic ethers.